McARTHUR II
NOAA
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13
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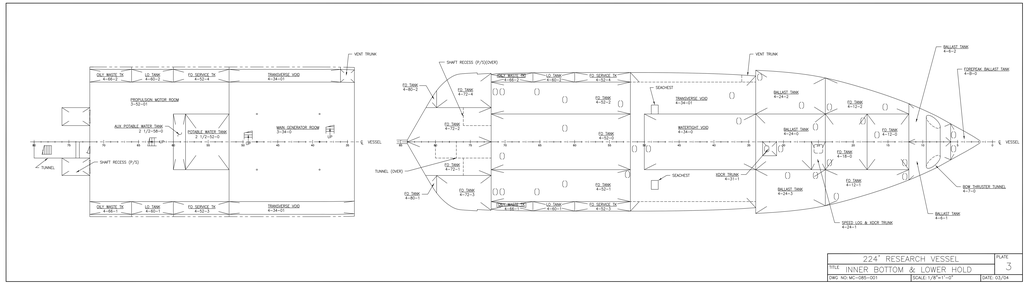
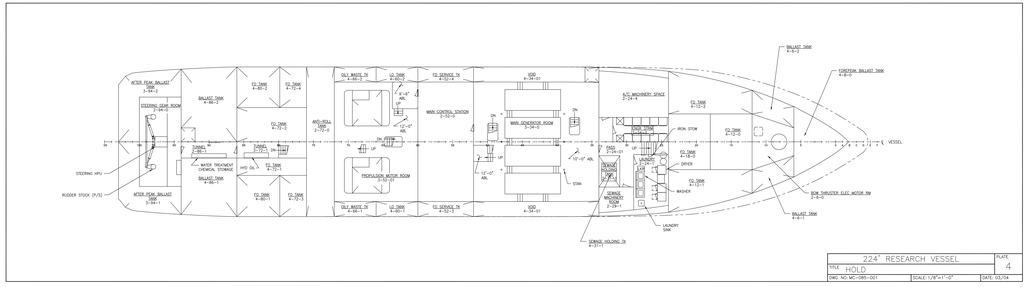
McARTHUR II



224' RESEARCH VESSEL	PLATE
TITLE: INNER BOTTOM & LOWER HOLD	3
DWG NO: MC-085-001	SCALE: 1/8"=1'-0"
	DATE: 03/04



224' RESEARCH VESSEL	PLATE
TITLE: HOLD	4
DWG NO: MC-085-001	SCALE: 1/8"=1'-0"
	DATE: 03/04

SHIPS STORES

SPACE	COMP. NO.	FRAMES	C.G. FROM M.P.	C.G. FROM B.L.	CU. FT. NET	CU. FT. GROSS	SQ. FT.
ENGR & REPAIR PARTS STRM	2-24-2	24-32	41.0	14.8		1175	
DRY PROVISIONS STRM	1-4-3	6-14	75.0	25.2		1550	
MAIN CYLINDER STRM	1-40-1	40-45	12.0	24.4		300	
SPARE PARTS & GENL STORES STRM	01-H-0	H-6	95.0	25.3		2750	
STOREROOM # 2	01-1-2	1-6	50.0	25.3		1430	

MISC LOCKERS

SPACE	COMP. NO.	FRAMES	LCG	VCG	CU. FT. NET	CU. FT. GROSS	SQ. FT.
CHAIN LKR	1-H-1	B-9	15.0	25.3		280	
CHAIN LKR	1-H-2	B-9	15.0	25.3		280	
TURN OUT LKR	1-27-2	27-31	58.0	24.8		140	
CC LKR	1-40-2	40-44	84.0	24.5		187	
BAGGAGE LKR	1-40-4	40-45	85.0	24.5		297	
CC LKR	1-41-1	41-44	125.0	24.5		150	
CC LKR	01-54-4	54-57	111.0	33.1		200	
CC LKR	01-54-6	54-57	111.0	33.1		120	
CC LKR	02-41-2	41-44	85.0	42.0		110	

LIFE RAFTS AND BOATS

COMPONENT	NO.	FRS.	DK.	CAP	TOTAL CAP.
LIFE RAFTS					
CO2 INFLATABLE	1	37-39	BRIDGE	25	
CO2 INFLATABLE	2	51-54	UPPER	25	
CO2 INFLATABLE	3	37-39	BRIDGE	25	
CO2 INFLATABLE	4	54-57	UPPER	25	
CO2 INFLATABLE	5	37-39	BRIDGE	25	
CO2 INFLATABLE	6	57-59	UPPER	25	150
BOATS					
17'-0" WORK BOAT	1	61-70	UPPER	15	
RESCUE BOAT	1	58-69	UPPER	6	

REFRIGERATED SPACES

SPACE	TEMP °F	LOCATION DECK	FRAMES	SIDE	GROSS CUBIC FT.
FREZE ROOM	0 °	MAIN	14-16	STBD	820
CHILL ROOM	37	MAIN	16-22	STBD	748
THAW ROOM	AMBIENT	MAIN	16-22	STBD	185

DEADWEIGHT SCALE

TONS PER INCH IMM	KEEL DRAFT	DISPL'T TONS, SW	DEADWEIGHT TONS, SW
	20'-0"	2600	1200
	19'-6"	2500	1100
18	19'-0"	2400	1000
	18'-6"	2300	900
	18'-0"	2200	800
17.5	17'-6"	2100	700
	17'-0"	2000	600
17	16'-6"	1900	500
	16'-0"	1800	400
16	15'-6"	1700	300
	15'-0"	1600	200
	14'-6"	1500	100
15	14'-0"	1450	0
	13'-6"	1300	
	13'-0"	1200	
14	12'-6"	1150	
	12'-0"	1000	
	11'-6"	900	

BOOKLET INDEX AND REVISIONS

PLATE	TITLE	LATEST REVISION NO	INITIAL	DATE
1	COVER SHEET & GENL INFORMATION			
2	DATA			
3	INNER BOTTOM			
4	HOLD			
5	MAIN DECK			
6	FORECASTLE DECK			
7	UPPER DECK			
8	BRIDGE DECK & HOUSE TOP			
9	OUTBOARD PROFILE			
10	INBOARD PROFILE			

PRINCIPAL CHARACTERISTICS

LENGTH DESIGN WL	224 FEET 0 INCHES
BEAM MAX MLD	43 FEET 0 INCHES
DRAFT AT DWL	15 FEET 1 INCH
DISPL AT DWL	2299 LT LTS
DEPTH, MOLDED	20 FEET 0 INCHES

WEIGHTS AND CONVERSIONS

LIQUID	SBL/TON	CU/FT/TON	GAL/TON
SW	8.23	35.93	261.83
FW	8.41	36.00	269.30
LO	6.84	39.00	291.45
DO	7.67	43.00	322.00

TON = 2240 LBS; CUFT = 7.48 GAL; SBL = 5.61 CUFT

SUMMARY OF TANKAGE CARRIED

TANK	U.S. GALLONS
DIESEL OIL	235,831
LUBE OIL	10,258
OILY WASTE	10,138
ARMY FLUID	1593
POTABLE WATER	4085
RESERVE FRESHWATER	1026
SEAWAGE	4063
SEA WATER BALLAST	130,796
ANTI-ROLL TANK	18,688

NOAA SHIP McARTHUR II	
BOOKLET OF GENERAL PLANS	
224' RESEARCH VESSEL	PLATE 1
TITLE: COVER SHEET & GENL INFORMATION	
DWG NO: MC-085-001	SCALE: NONE
	DATE: 03/04

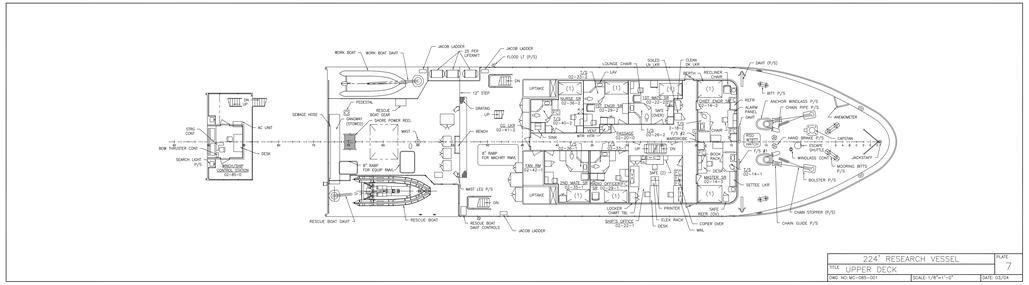
TANK	FRAME LOC.	INERTIA (FEET4)	CAPACITY (TONS)	CAPACITY (GAL)	VCG (FT)	LCG (FT)	TCG (FT)
*** OILY WASTE TANKS (95% CAPACITY) ***							
4-88-1-F	66-72	76	18.39	5069	12.47	137.82	19.28
4-88-2-F	66-72	76	18.39	5069	12.47	137.82	-19.28
*** LUBE OIL TANKS (95% CAPACITY) ***							
4-40-1-F	60-66	62	17.23	5289	12.14	125.99	19.28
4-40-2-F	60-66	62	17.23	5289	12.14	125.99	-19.28
*** POTABLE WATER TANKS (100% CAPACITY) ***							
2½-52-0-W	52-58	5134	15.09	4065	7.61	110.37	0.00
2½-58-0-W	58-60	1307	3.85	1036	7.61	118.36	0.00
*** MISCELLANEOUS TANKS (95% CAPACITY) ***							
ANTI-ROLL (S/B)	72-77	6491ft	35.65	18,668	16.98	149.05	-0.07
CHAIN LKR (S) 100%	6-9	83	8.34	2180	25.25	15.00	-2.75
CHAIN LKR (P) 100%	6-9	83	8.34	2180	25.25	15.00	2.75
ARMY COLL TK (MRE)	92-94	21	0.00	1093	15.34	185.95	1.99
KEEL VOID (100%)	68-94	15	0.00	2656	3.48	168.44	0.00
CITYSTRM (100%)	52-60	655	0.00	3730	5.42	12.00	0.00
LOG & XDCR TRUNK (100%)	24-26	171	–	2070	5.41	50.00	-3.84
XDCR TRUNK (100%)	31-33	21	–	1143	5.11	64.00	-1.98
SEW HOLDING TK (100%)	31-34	370	–	4063	15.13	65.00	+8.50

TANK	FRAME LOC.	INERTIA (FEET4)	CAPACITY (TONS)	CAPACITY (GAL)	VCG (FT)	LCG (FT)	TCG (FT)
*** FUEL TANKS (95% CAPACITY) ***							
4-12-0-F	12-18	4014	78.75	26,227	11.28	30.06	0.00
4-12-1-F	12-24	2166	65.76	21,903	13.38	37.88	12.24
4-12-2-F	12-24	2166	65.76	21,903	13.38	37.88	-12.24
4-18-0-F	18-24	4014	81.79	27,242	10.83	42.02	0.00
4-52-0-F	52-72	12,796	54.20	18,053	2.52	123.13	0.00
4-52-1-F	52-72	2910	22.66	7547	3.11	122.82	12.29
4-52-2-F	52-72	2910	22.66	7547	3.11	122.82	-12.29
4-52-3-F	52-60	85	21.29	7092	12.10	112.00	19.28
4-52-4-F	52-60	85	21.29	7092	12.10	112.00	-19.28
4-72-1-F	72-86	1387	49.24	16,400	10.77	160.82	6.00
4-72-2-F	72-86	2088	75.49	25,143	11.85	159.41	+4.78
4-72-3-F	72-80	1636	41.44	13,803	11.15	152.87	15.41
4-72-4-F	72-80	1636	41.44	13,803	11.15	152.87	-15.41
4-80-1-F	80-86	1375	33.29	11,088	14.22	165.76	15.50
4-80-2-F	80-86	1375	33.29	11,088	14.22	165.76	-15.50

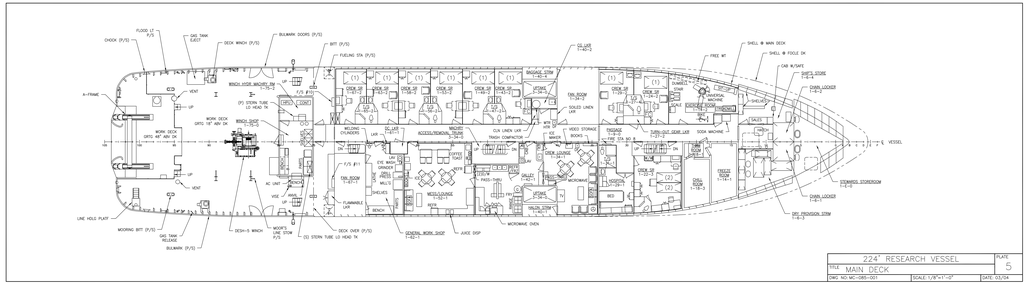
TANK	FRAME LOC.	INERTIA (FEET4)	CAPACITY (TONS)	CAPACITY (GAL)	VCG (FT)	LCG (FT)	TCG (FT)
*** BALLAST TANKS (100% CAPACITY) ***							
4-0-0-W	STEM-6	3002	36.86	9851	15.45	7.65	0.00
4-6-1-W	6-12	672	29.80	7802	11.83	18.62	6.00
4-6-2-W	6-12	672	29.80	7801	11.83	18.62	-6.00
4-24-0-W	24-34	5845	70.78	18,524	5.34	58.63	+0.57
4-24-2-W	24-34	2636	42.87	11,250	6.44	58.61	13.07
4-24-2-W	24-34	2636	42.87	11,250	6.44	58.61	-13.07
4-86-1-W	86-94	9818	74.50	19,553	14.88	179.44	11.30
4-86-2-W	86-94	11,274	84.88	22,221	15.17	179.21	-10.25
3-94-1-W	94-STERN	8837	43.53	11,397	16.20	197.55	11.05
3-94-2-W	94-STERN	8837	43.53	11,397	16.20	197.55	-11.05

224' RESEARCH VESSEL	PLATE
TITLE: DATA	2
DWG NO: MC-085-001	SCALE: NONE
	DATE: 03/04

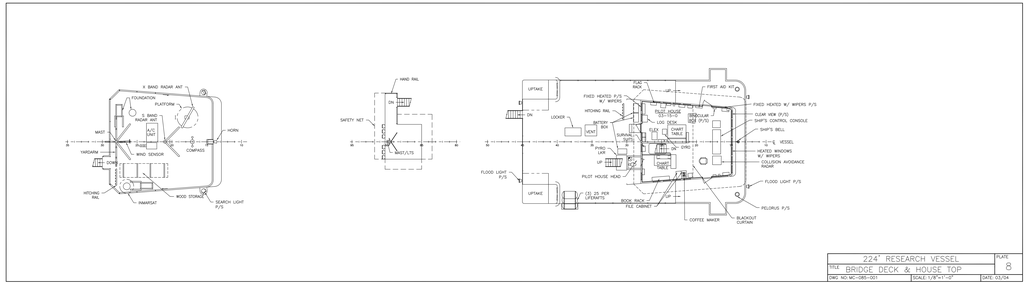
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION OFFICE OF NOAA CORPS OPERATIONS	
ART ANDERSON ASSOCIATES, INC.	NOAA SHIP McARTHUR II
AAA-054041	BOOKLET OF GENERAL PLANS
DSGN: JS MAY 2004	
DRN: MFW MAY 2004	
CHK: JS MAY 2004	
CHK: CJP MAY 2004	
NOAA APPROVAL:	SIZE: D; CAGE CODE: H0YL5; NOAA DRAWING NUMBER: MC-085-001; REV: –; SCALE: AS SHOWN; CAD FILENAME: MC-085-001 SHT 1 OF 2



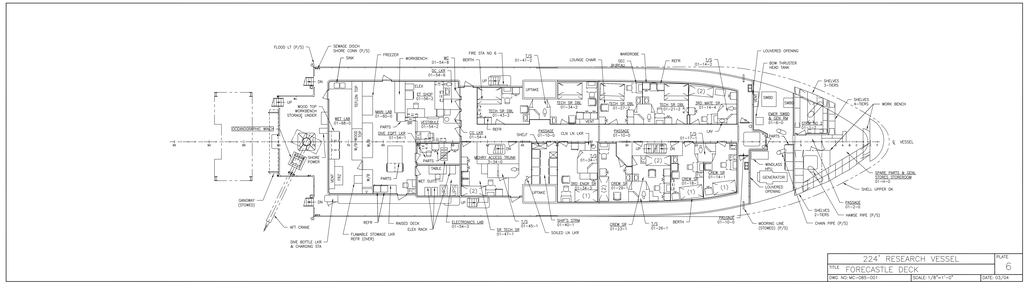
224' RESEARCH VESSEL	PLATE 7
TITLE: UPPER DECK	
DWG NO: MC-085-001	SCALE: 1/8"=1'-0" DATE: 03/04



224' RESEARCH VESSEL	PLATE 5
TITLE: MAIN DECK	
DWG NO: MC-085-001	SCALE: 1/8"=1'-0" DATE: 03/04



224' RESEARCH VESSEL	PLATE 8
TITLE: BRIDGE DECK & HOUSE TOP	
DWG NO: MC-085-001	SCALE: 1/8"=1'-0" DATE: 03/04



224' RESEARCH VESSEL	PLATE 6
TITLE: FORECASTLE DECK	
DWG NO: MC-085-001	SCALE: 1/8"=1'-0" DATE: 03/04

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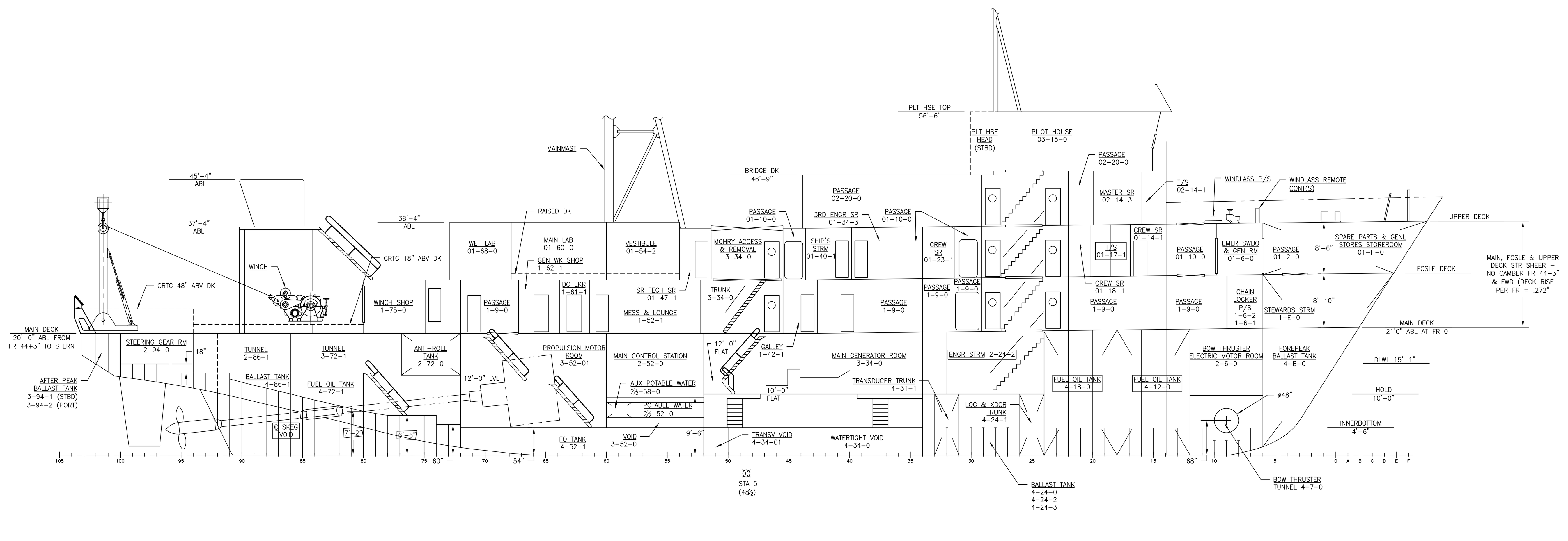
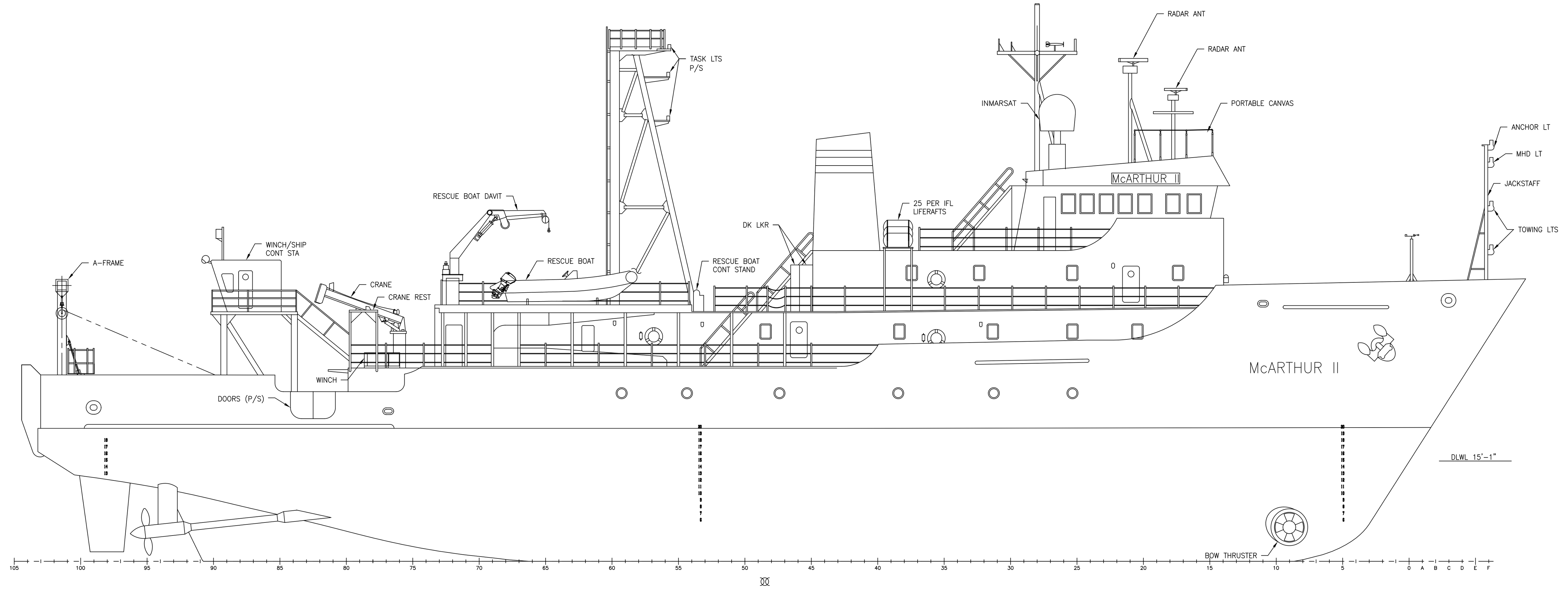
SCALE: AS SHOWN		CAD FILENAME: MC-085-001	SHT 2 OF 3



224' RESEARCH VESSEL		PLATE 10
TITLE INBOARD PROFILE		
DWG NO: MC-085-001	SCALE: 1/8"=1'-0"	DATE: 03/04



224' RESEARCH VESSEL		PLATE 9
TITLE OUTBOARD PROFILE		
DWG NO: MC-085-001	SCALE: 1/8"=1'-0"	DATE: 03/04

SIZE	CAGE CODE	NOAA DRAWING NUMBER	REV
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